

Please amend the specification as follows:

At page one, following the title, the following paragraph has been added to the revised specification filed herewith.

--Related Applications

This application is a divisional application of U.S. Patent Application No. 09/459,443, filed December 13, 1999, allowed, the disclosure of which is incorporated herein by reference in its entirety.--

IN THE CLAIMS

Please amend the claims as follows.

Please cancel claims 1-32 without prejudice.

Please add the following new claims. These claims are included in the revised specification and renumbered 1- 35 for publication of this divisional application.

33(1). A method of providing release of cholecystokinin in a subject, comprising administering to the subject an effective amount of a luminal cholecystokinin releasing factor polypeptide comprising

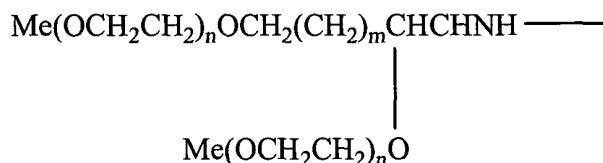
- i) a lysine residue;
- ii) an oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide; and
- iii) an oligomeric moiety attached to the lysine residue,

whereby upon administration to the subject, said compound integrates into a cell membrane of the gut epithelium of the subject wherein the luminal cholecystokinin releasing factor

polypeptide binds with a target receptor on the surface of an epithelial cell, thereby providing release of cholecystokinin.

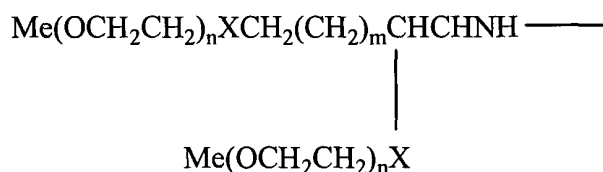
34.(2) The method of claim 33, wherein the oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor peptide is a branched oligomeric moiety.

35.(3) The method of claim 34, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20.

36.(4) The method of claim 34, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S.

37.(5) The method of claim 34, wherein the branched oligomeric moiety has a total average molecular weight of 4,000 to 10,000 Daltons.

38.(6) The method of claim 33, wherein the oligomeric moiety is attached to the N-terminus using a hydrolyzable linker.

39.(7) The method of claim 34, wherein the branched oligomeric moiety is attached to the N-terminus using a non-hydrolyzable linker.

40.(8) The method of claim 33, wherein the oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide has a total average molecular weight of 4,000 to 10,000 Daltons.

41.(9) The method of claim 33, wherein the oligomeric moiety is attached to the lysine residue using a hydrolyzable bond.

42.(10) The method of claim 33, wherein the oligomeric moiety attached to the lysine residue is a linear oligomeric moiety.

43.(11) The method of claim 42, wherein the linear oligomeric moiety is attached to the lysine residue using a hydrolyzable bond.

46.(12) The method of claim 33, further comprising a lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

47.(13) The method of claim 46, further comprising a linear oligomeric moiety attached to the lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

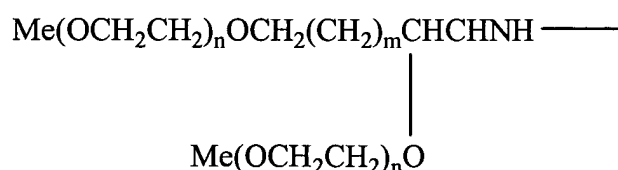
48.(14) A method of treating obesity in a subject comprising administering to the subject an effective amount of a luminal cholecystokinin releasing factor polypeptide comprising
i) a lysine residue;

ii) an oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide; and

iii) an oligomeric moiety attached to the lysine residue.

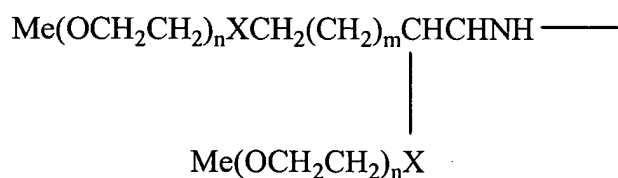
49.(15) The method of claim 48, wherein the oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor peptide is a branched oligomeric moiety.

50.(16) The method of claim 49, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20.

51.(17) The method of claim 49, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S.

52.(18) The method of claim 49, wherein the branched oligomeric moiety has a total average molecular weight of 4,000 to 10,000 Daltons.

53.(19) The method of claim 48, wherein the oligomeric moiety is attached to the N-

terminus using a hydrolyzable linker.

54.(20) The method of claim 49, wherein the branched oligomeric moiety is attached to the N-terminus using a non-hydrolyzable linker.

55.(21) The method of claim 48, wherein the oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide has a total average molecular weight of 4,000 to 10,000 Daltons.

56.(22) The method of claim 48, wherein the oligomeric moiety is attached to the lysine residue using a hydrolyzable bond.

57.(23) The method of claim 48, wherein the oligomeric moiety attached to the lysine residue is a linear oligomeric moiety.

58.(24) The method of claim 57, wherein the linear oligomeric moiety is attached to the lysine residue using a hydrolyzable bond.

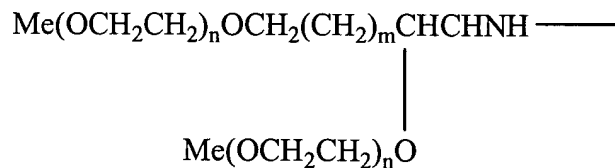
59.(25) The method of claim 48, further comprising a lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

60.(26) The method of claim 59, further comprising a linear oligomeric moiety attached to the lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

61.(27) A method of providing release of cholecystokinin in a subject, comprising administering to the subject an effective amount of a luminal cholecystokinin releasing factor polypeptide comprising

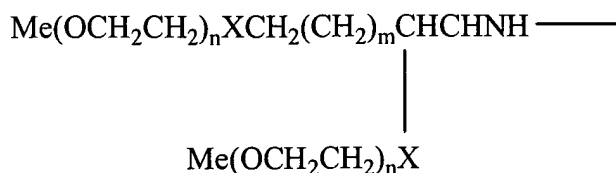
- i) a first lysine residue;
 - ii) a second lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide;
 - iii) a branched oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide using a non-hydrolyzable linker;
 - iv) a linear oligomeric moiety attached to the first lysine residue of the luminal cholecystokinin releasing factor polypeptide using a hydrolyzable bond; and
 - v) a linear oligomeric moiety attached to the second lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide,
- whereby, upon administration to the subject, said compound integrates into a cell membrane of the gut epithelium of the subject wherein the luminal cholecystokinin releasing factor polypeptide binds with a target receptor on the epithelial cell surface, thereby providing release of cholecystokinin.

62.(28) The method of claim 61, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20.

63.(29) The method of claim 61, wherein the branched oligomeric moiety has the following formula:



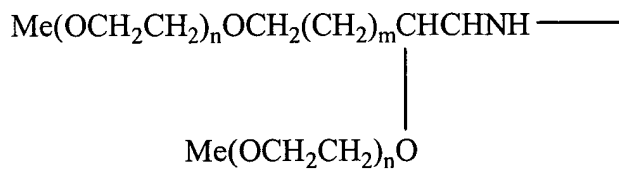
where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S.

64.(30) The method of claim 61, wherein the branched oligomeric moiety has a total average molecular weight of 4,000 to 10,000 Daltons.

65.(31) A method of treating obesity in a subject, comprising administering to the subject an effective amount of a luminal cholecystokinin releasing factor polypeptide comprising

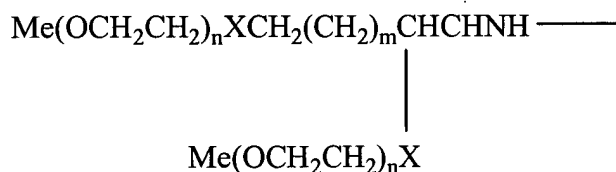
- i) a first lysine residue;
- ii) a second lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide;
- iii) a branched oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide using a non-hydrolyzable linker;
- iv) a linear oligomeric moiety attached to the first lysine residue of the luminal cholecystokinin releasing factor polypeptide using a hydrolyzable bond; and
- v) a linear oligomeric moiety attached to the second lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

66.(32) The method of claim 65, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20.

67.(33) The method of claim 65, wherein the branched oligomeric moiety has the following formula:

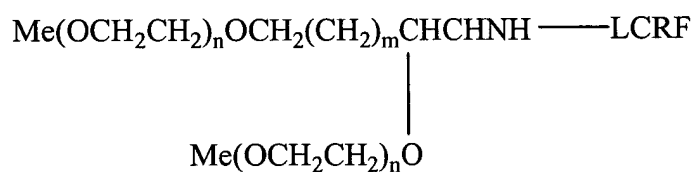


where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S.

68.(34) The method of claim 65, wherein the branched oligomeric moiety has a total average molecular weight of 4,000 to 10,000 Daltons.

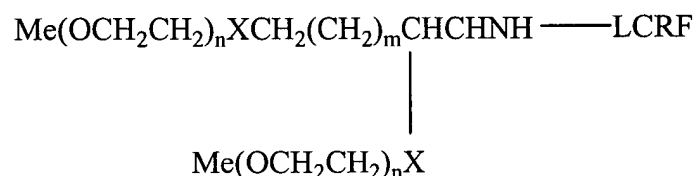
69.(35) A method of treating obesity in a subject comprising administering to the subject an effective amount of a compound selected from the group consisting of:

a) A compound of the formula:



where n is from 3 to 230 and m is from 0 to 20;

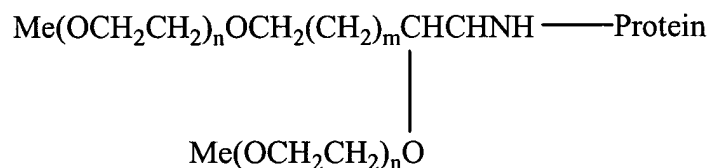
b) A compound of the formula:



where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group

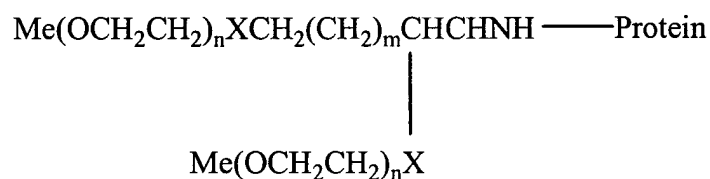
consisting of N, O or S;

c) A compound of the formula:



where n is from 3 to 230 and m is from 0 to 20; and

d) A compound of the formula:



where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S;
and any combination thereof.